

□yAbstract□z

The present invention relates to a method for manufacturing compacted materials of fine reduced irons with a plate form, which can be continuously produced with further thickness thereof during manufacturing of molten iron using raw coals and fine iron ores. In addition, the present invention relates to a method for manufacturing compacted materials for being used in a melter-gasifier by using the compacted materials with a plate form.

According to the present invention, in a process for manufacturing molten iron using raw coals and fine iron ores, a method for manufacturing compacted materials of fine reduced irons with a plate form and a method for manufacturing compacted materials for being used in a melter-gasifier by using the compacted materials comprising a step of arranging grooves of the left and right press rolls with a suitable gap therebetween to be offset with each other; and a step of manufacturing compacted materials with a plate form by charging and pressing mixture of the hot fine reduced irons and calcined additives or only hot fine reduced irons discharged from a final reduction reactor of fluidized-bed reduction reactors into a gap formed between the left and right press rolls while rotating them along a direction opposing to each other, thereby manufacturing the compacted materials with a plate form are provided. A surface of the left and right press rolls includes flat portions and the grooves.

The present invention has an effect to improve not only productivity but also efficiency of a process for manufacturing molten iron.

□yRepresentative Drawing□z

FIG. 2

□yKeyword□z

fluidized-bed reduction reactor, melter-gasifier, fine reduced iron, calcined additive, compacted material